Amendments to the Claims

Listing of the Claims

This listing of claims will replace all prior versions and listings of claims in the above-identified application.

1.   **(Currently amended)** A computer-implemented method, comprising:

receiving search criteria from a graphical user interface generated by a computing device, wherein the search criteria includes at least one search keyword;

passing the received search criteria to a Virtual Business Component (VBC), the VBC representing a database as a business object;

the VBC invoking a search execution business service;

searching the database for data records matching the search criteria using the search execution business service;

generating search results comprising of the data records matching the received search criteria; and

caching the search results in a computer memory to maintain persistency of the search results.

2.   **(Currently amended)** The computer-implemented method of claim 1, wherein receiving search criteria further comprises receiving at least one search category.

3.   **(Currently amended)** The computer-implemented method of claim 1, further comprising refining the search results based on at least one result refining keyword from the graphical user interface.

4.   (Canceled)

5.   (**Currently amended**) The <u>computer-implemented</u> method of claim 1, further comprising:

passing the received search criteria from the Virtual Business Component to the search execution business service.

6.   (**Currently amended**) The <u>computer-implemented</u> method of claim 1, wherein

the search execution business service remains in existence until a user session is terminated.

7.   (**Currently amended**) The <u>computer-implemented</u> method of claim 1, wherein caching the search results further comprises:

caching the search results in the search execution business service to maintain persistency of the search results.

8.   (**Currently amended**) The <u>computer-implemented</u> method of claim 1, wherein caching the search results further comprises:

caching the search results in the search execution business service until termination of a user session to maintain persistency of the search results until termination of the user session.

9.   (**Currently amended**) The <u>computer-implemented</u> method of claim 1, further comprising:

sending the search results to a frame so that the search results can be listed on a user interface.

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10.   **(Currently amended)** A <u>computer-implemented</u> method, comprising:

      receiving a search category and a search keyword from a <u>graphical</u> user interface

            generated by a computing device;

      passing the received search category and the search keyword to a Virtual Business

            Component (VBC), the VBC representing a database as a business object;

      the VBC invoking a search execution business service;

      searching the database for data records matching the search category and the search

            keyword using the search execution business service;

      generating search results comprising of the data records matching the search category and

            the search keyword; and

      caching the search results <u>in a computer memory</u> to maintain persistency of the search

            results until termination of a session.

11.   (Canceled)

12.   **(Currently amended)** The <u>computer-implemented</u> method of claim 10, further
comprising:

      passing the received search category and the search keyword from the Virtual Business

            Component to the search execution business service.

13.   **(Currently amended)** The <u>computer-implemented</u> method of claim 10, wherein

      the search execution business service remains in existence until a user session is

            terminated.

14.   **(Currently amended)** The <u>computer-implemented</u> method of claim 10, wherein caching
the search results further comprises:

      caching the search results in the search execution business service to maintain persistency

            of the search results until termination of a session.

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15.   **(Currently amended)** The <u>computer-implemented</u> method of claim 10, further comprising:

> sending the search results to a frame so that the search results can be listed on a user interface.

16.   (Previously presented) A system, comprising:

> a user interface generated by a computing device to receive search criteria entered by a user, wherein the search criteria includes at least one search keyword;

> a Virtual Business Component (VBC) to receive the search criteria from the user interface and to represent a database as a business object;

> a business service to receive the search criteria from the Virtual Business Component, to perform a search in the database for data records matching the search criteria, to generate search results comprising of the data records matching the received search criteria, and to cache the search results to maintain persistency of the search results, wherein the business service is invoked by the VBC.

17.   (Original) The system of claim 16, wherein the search criteria comprises at least one search category.

18.   **(Currently amended)** The system of claim 16, wherein the business service refines the search results based on at least one result refining keyword entered by the user <u>and a cached set of the search results</u>.

19.   (Original) The system of claim 16, wherein the business service caches the search results until termination of a user session to maintain persistency of the search results until termination of the user session.

20.   (Original) The system of claim 16, wherein the business service sends the search results to the user interface so that the search results can be listed on the user interface.

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21. (Previously presented) A system, comprising:

> a user interface generated by a computing device to receive search criteria entered by a user, wherein the search criteria includes at least one search keyword;

> a Virtual Business Component (VBC) to receive the search criteria from the user interface and to represent a database as a business object;

> a business service to receive the search criteria from the Virtual Business Component, to perform a search in the database for data records matching the search criteria, and to cache search results to maintain persistency of the search results, wherein the business service is invoked by the VBC.

22. (Original) The system of claim 21, wherein the search criteria comprises at least one search category.

23. (Previously presented) The system of claim 21, wherein the business service performs a second search based on at least one result refining keyword entered by the user.

24. (Previously presented) The system of claim 21, further comprising:

> a search adapter to adapt to a selected search engine and to generate search results comprising of the data records matching the received search criteria, wherein

> the business service caches the search results generated by the search adapter to maintain persistency of the search results.

25. (Original) The system of claim 24, wherein the business service caches the search results until termination of a user session to maintain persistency of the search results until termination of the user session.

26. (Previously presented) The system of claim 21, wherein the business service sends the search results to a search frame so that the search results can be listed on the user interface.

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27. (Previously presented) A machine-readable medium comprising instructions which, when executed by a machine, cause the machine to perform operations comprising:

receiving search criteria from a graphical user interface generated by a computing device, wherein the search criteria includes at least one search keyword;

passing the received search criteria to a Virtual Business Component (VBC), the VBC representing a database as a business object;

the VBC invoking a search execution business service;

searching the database for data records matching the search criteria using the search execution business service;

generating search results comprising of the data records matching the received search criteria; and

caching the search results to maintain persistency of the search results.

28. (Original) The machine-readable medium of claim 27, wherein receiving search criteria further comprises receiving at least one search category and at least one search keyword.

29. (Previously presented) The machine-readable medium of claim 27, wherein caching the search results further comprises:

caching the search results in the search execution business service until termination of a user session to maintain persistency of the search results until termination of the user session.

30. (Original) The machine-readable medium of claim 27, further comprising:

sending the search results to a search frame so that the search results can be listed on a user interface.

31. (Previously presented) The machine-readable medium of claim 27, further comprising refining the search results based on at least one result refining keyword entered by the user.

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32.   (Previously presented) The method of claim 1, wherein:

the search execution business service is configured to provide an abstraction between the

VBC and a search adapter, and the VBC is configured to provide a layer of

wrapping over a plurality of databases.

33.   (Previously presented) The method of claim 1, wherein:

the search execution business service is not tied to the database, and has access to a

plurality of databases.

34.   (Previously presented) The method of claim 1, wherein:

the search execution business service is not tied to the database, and has access to a

plurality of databases via a search adapter.

35.   (Previously presented) The method of claim 10, wherein:

the search execution business service is configured to provide an abstraction between the

VBC and a search adapter, and the VBC is configured to provide a layer of

wrapping over a plurality of databases, and

the search execution business service is not tied to the database, and has access to a

plurality of databases via a search adapter.

36.   (Previously presented) The system of claim 16, wherein:

the VBC is configured to provide a layer of wrapping over a plurality of databases.

37.   (Previously presented) The system of claim 16, wherein:

the business service is not tied to the database, and has access to a plurality of databases

via a search adapter.

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38.   (Previously presented) The system of claim 21, wherein:

the VBC is configured to provide a layer of wrapping over a plurality of databases.

39.   (Previously presented) The system of claim 21, wherein:

the business service is not tied to the database, and has access to a plurality of databases
via a search adapter.

40.   (Previously presented) The machine-readable medium of claim 27, wherein:

the VBC is configured to provide a layer of wrapping over a plurality of databases.

41.   (Previously presented) The machine-readable medium of claim 27, wherein:

the search execution business service is not tied to the database, and has access to a
plurality of databases via a search adapter.

42.   (New) The system of claim 18, wherein the business service refines the search results
based on the result refining keyword and a proximity that is measured by a number of characters
and entered by a user.

43.   (New) The computer-implemented method of claim 1, further comprising:

attaching a search result from a cached set of the search results to another object.

44.   (New) The computer-implemented method of claim 1, further comprising:

refining the search results based on at least one result refining keyword from the
graphical user interface and a cached set of the search results.

45.   (New) The computer-implemented method of claim 1, further comprising:

attaching a search from a cached set of the search results to a service request, wherein the
attached search result is selected by a user from a record in a results list.

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46.   (New) The computer-implemented method of claim 1, further comprising:

    attaching a search from a cached set of the search results to a response email message,

        wherein the response email message is responsive to a query that prompted the

        search criteria.

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